



Spring Cleaning: Geodatabase Style

Data Organization- Bad

- Shapefiles
- Coverages
- CAD DWGs
- Multiple geodatabases
 - 8.x, 9.x, 10?
- GeoTIFF
- TIF w/ world file
- MrSID
- Directories for every day of the month



Beginning of the Answer

- Clean Up!
- Organize!
- Throw Out!
- Standardize!
- But first...
 - *Think About Workflows*
 - *Needs- Now and Future*
 - *Users- Capabilities*
 - *Integration with other systems*



GIS for Local Government

- Built by Esri
 - *Customizable by you*
- Map and App mentality
 - *Focus on the users and the interactions (maps and apps)*
- Much more than historically provided geodatabases
- Apps for desktop, web, and mobile
 - *Configurable to connect to your data through XMLs*



The Geodatabase

- 24 Feature Datasets
- 232 Feature Classes
- 1 Topology
- 3 Geometric Network
- 2 Rasters
- 43 Tables
- 42 Relationship Classes
- 208 Domains



And... Metadata

- No Metadata = Data Misuse
 - *Or Even People Throwing Out Data Altogether as Worthless*

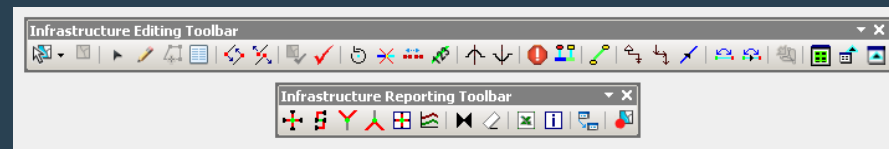


Infrastructure

NOW INTO THE MAPS AND APPS (AND GEODATABASE)

Infrastructure Editing Toolbar

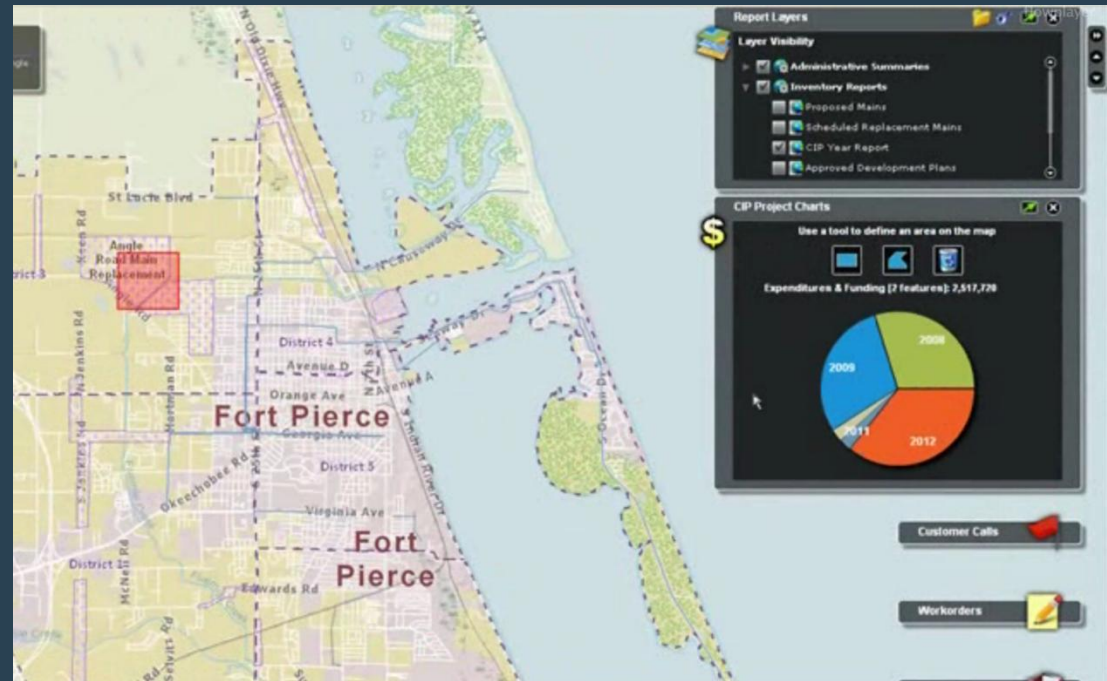
- Automated tools for adding related features
- Complex ID generators
- Automated line splitting
- Quick tracing tools
- Valve isolation



```
<AddLateralDetails Name="Hydrants to Mains">
  <Point_LayerName>Water Hydrants</Point_LayerName>
  <MainLine_LayerName>Water Mains</MainLine_LayerName>
  <LateralLine_LayerName>Water Lateral Lines</LateralLine_LayerName>
  <Point_FieldToCalcFromMain>LOCDESC</Point_FieldToCalcFromMain>
  <Main_FieldToCalcForPoint>FACILITYID</Main_FieldToCalcForPoint>
  <Point_PrefixForMainValue>PipeId:</Point_PrefixForMainValue>
  <LateralLine_EditTemplate>6" Ductile Iron Fire</LateralLine_EditTemplate>
  <LateralLine_StartAtMain>true</LateralLine_StartAtMain>
  <DeleteExistingLines>true</DeleteExistingLines>
  <ToleranceForDelete>.5</ToleranceForDelete>
  <!--restrict searches by layer definition-->
  <SearchOnLayer>true</SearchOnLayer>
  <!--The distance to search for the closest line from the point-->
  <SearchDistance>500</SearchDistance>
  <PointsAlong>
    <PointAlong>
      <LayerName>Water Fittings</LayerName>
      <EditTemplate>Tee</EditTemplate>
      <Distance>0</Distance>
      <DistanceIsPercent>true</DistanceIsPercent>
    </PointAlong>
    <PointAlong>
      <LayerName>Water System Valves</LayerName>
      <EditTemplate>Ball</EditTemplate>
      <Distance>50</Distance>
      <DistanceIsPercent>true</DistanceIsPercent>
    </PointAlong>
  </PointsAlong>
  <Dual_When_Two_Selected>false</Dual_When_Two_Selected>
  <Dual_When_Nearby>false</Dual_When_Nearby>
  <Dual_Max_Distance_When_Two_Selected>0</Dual_Max_Distance_When_Two_Selected>
  <Dual_Max_Distance_When_Nearby>0</Dual_Max_Distance_When_Nearby>
  <Dual_Option_Make_Square>false</Dual_Option_Make_Square>
  <Hook_DoglegDistance>0</Hook_DoglegDistance>
  <Hook_DistanceIsPercent>false</Hook_DistanceIsPercent>
  <Hook_Angle>45</Hook_Angle>
</AddLateralDetails>
```


Infrastructure Dashboard (Water/ Wastewater)

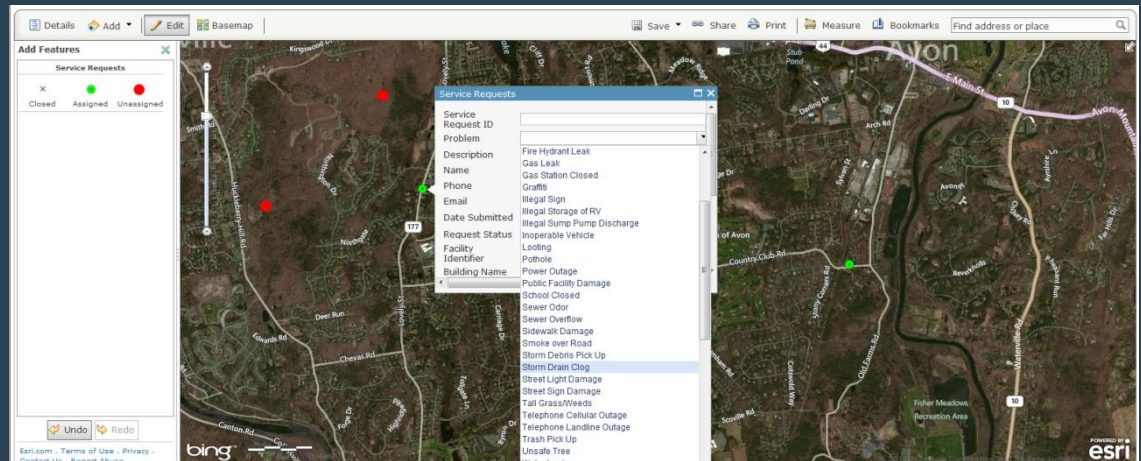
- Great management, customer, and field access portal
- Financial planning
- Work orders
- Customer calls
- Lateral cards
- Built for Flex




Wireless Access Using Tablets



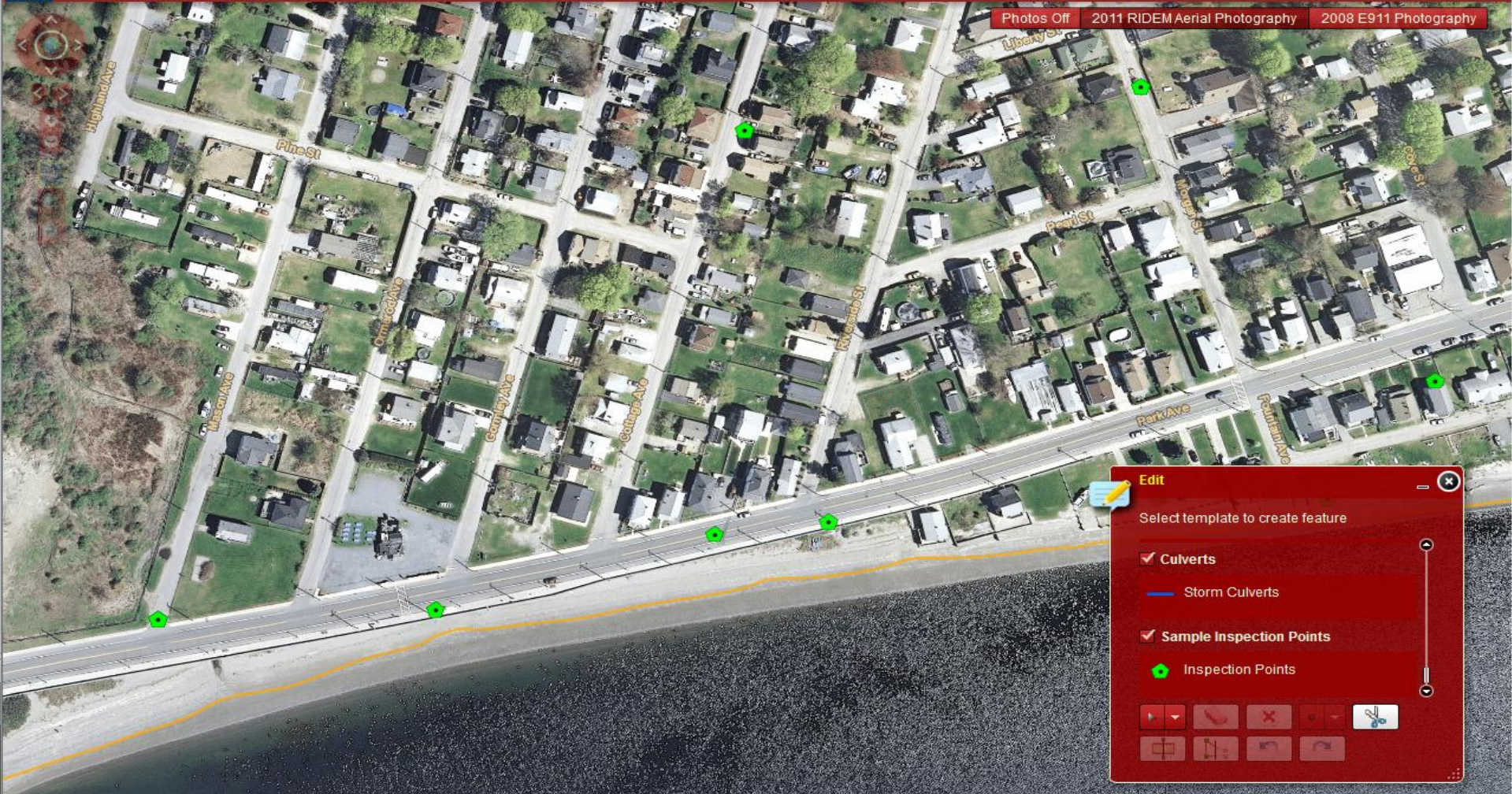
A field editor collecting fire hydrant information using a Windows based tablet.



Current Outfall Survey

 **Base Map**
for the Town of Portsmouth

Photos Off 2011 RIDEM Aerial Photography 2008 E911 Photography About



Edit

Select template to create feature

- ☒ Culverts
 - Storm Culverts
- ☒ Sample Inspection Points
 - Inspection Points

100 m
300 ft
Latitude (Y): 41.609125 Longitude (X): -71.192357

Data Collection

- Focus on QUALITY
- Develop STANDARDS
 - *Data Collection*
 - *Data Development*
 - *Geodatabase Designs*
 - *QA/QC*
 - *Map Standards*



Accuracy

- Statements of Accuracy Require Surveyor Certification
- Use of Sub-Foot GPS Does Not Mean Sub-Foot Data
- RFP Requesting Sub-Foot Data, Requires Surveyor
 - *RFP Requesting Collection of Data Using Equipment Capable of Sub-Foot Accuracy Does Not*
- We tend to use state orthos which gives ability to use phone GPS and manual placement for consistent accuracy

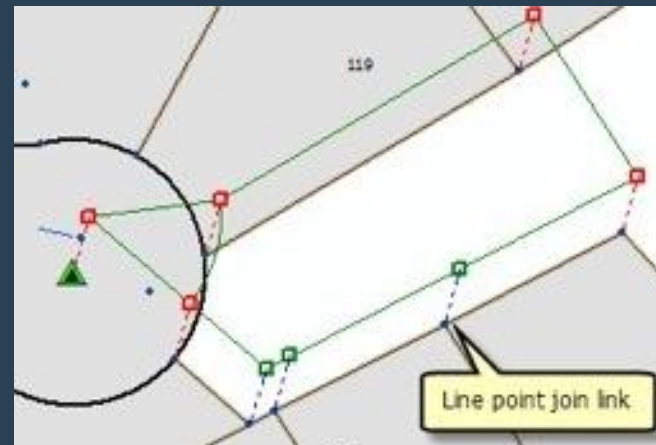


Land Records

NOW INTO THE MAPS AND APPS (AND GEODATABASE)

Land Records

- Includes relationships between parcel fabric and display parcels (2 distinct datasets)
- Allows for inspections
- Reports
 - *Value analyses*
 - *Public notifications*
 - *Many more*
- Access for desktop, web, mobile



Owner of Record: MARTO, PAUL C-BARRARA, A.
 80 GRAYVIEW DR.
 GASTONBURY, CT 06033-3931
 Account Number: 12000000
 Zoning: R-1
 Average: 1.1899902

VALUATION SUMMARY	
Category	Appraised Value
Land	\$127,000.00
Improvements	\$111,000.00
Net	\$117,000.00
Gross	\$146,000.00

BUILDING, EXTRA ITEMS	
Building Type	Quantity
House, Single	1.00
Garage, Attached	1.00

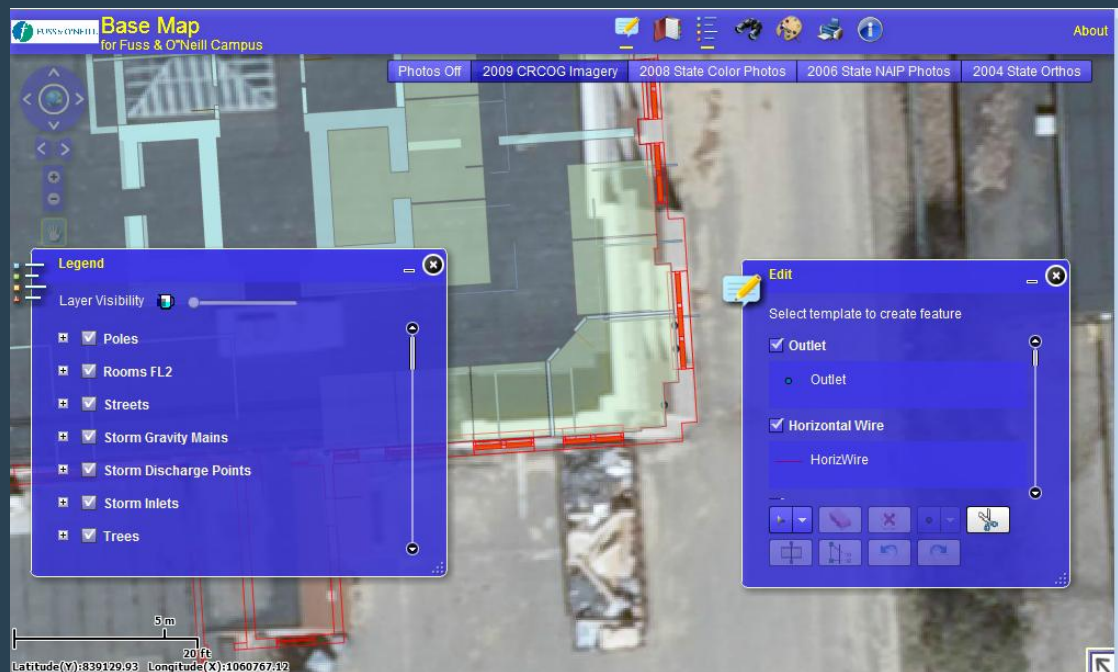
SALES HISTORY			
Owner of Record	Deed Type	Deed Date	Sale Price
TALBOT, ELLIOT C-BARRARA, A.	1100-0200	1/1/1993	\$111,000.00
TALBOT, ELLIOT C-BARRARA, A.	1100-0200	1/1/1993	\$0.00
TALBOT, ELLIOT C-BARRARA, A.	1100-0200	1/1/1993	\$0.00
TALBOT, ELLIOT C-BARRARA, A.	1100-0200	1/1/1993	\$0.00

Facilities and Streets

NOW INTO THE MAPS AND APPS (AND GEODATABASE)

Facilities and Streets

- Go into a building
- See everything from building to sidewalk to parking lot to plantings
- Includes painting and pavement conditions

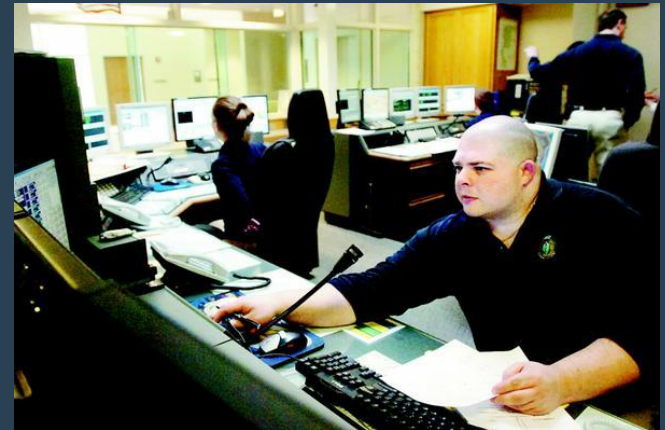
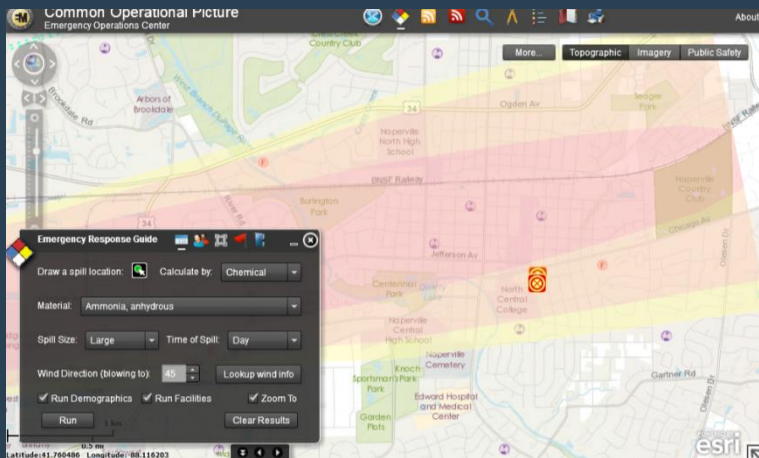
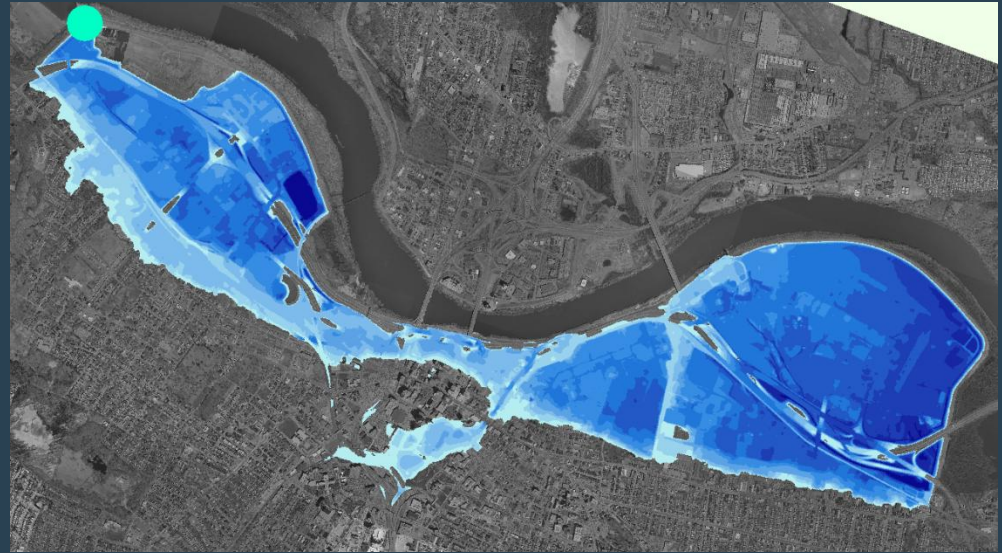


Public Safety

NOW INTO THE MAPS AND APPS (AND GEODATABASE)

Public Safety

- Common Operational Picture
- Quicker Response
- Allows for Interaction
- Floods
- Integrating data using the common datamodel



Spring NEARC 2012

Many More (Capital Planning, Planning/ Development, Elections, etc)

**I'M GUESSING THIS TAKES ME
TO THE TIME LIMIT...**

QUESTIONS



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